

Ex. No.: 1

Date: 27/9/24

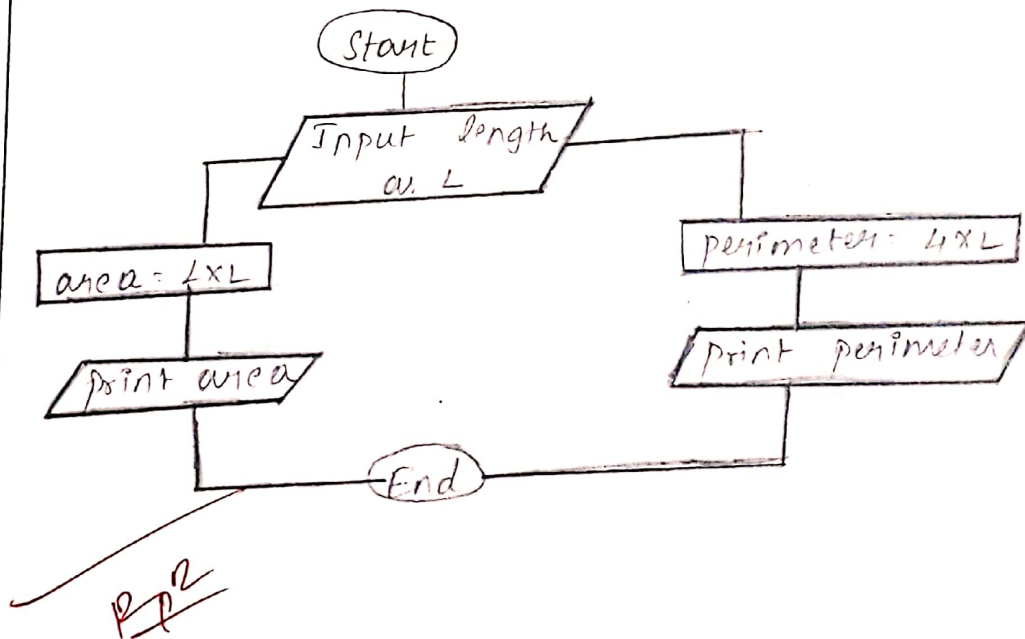
**Calculate Area and Perimeter**

Write an Algorithm and draw a Flowchart to Calculate the area and perimeter of a square.

**Algorithm:**

- Step 1: Start
- Step 2: Input side length as  $L$
- Step 3:  $\text{Area} = L * L = A$
- Step 4:  $\text{perimeter} = 4 * L = P$
- Step 5: print  $A$
- Step 6: print  $P$
- Step 7: stop

**Flowchart:**



Ex. No.: 2

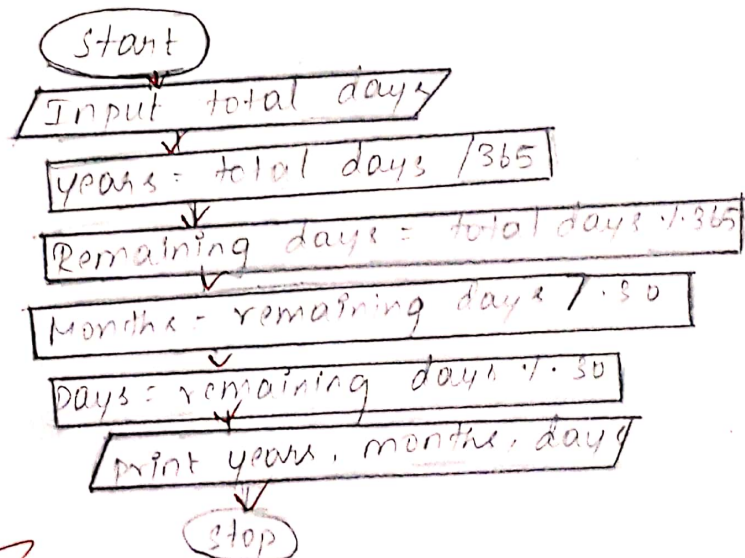
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**Days to Year Conversion**

Write an Algorithm and draw a Flowchart to convert the given days into years & months.

**Algorithm:**

- step 1: Read the value for total days  
 step 2:  $\text{years} = \text{total days} / 365$   
 step 3:  $\text{Remaining days} = \text{total days} \% 365$   
 step 4:  $\text{Months} = \text{remaining days} / 30$   
 step 5:  $\text{days} = \text{remaining days} \% 30$   
 step 6: display years, months, days

**Flowchart:**

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Ex. No.: 3

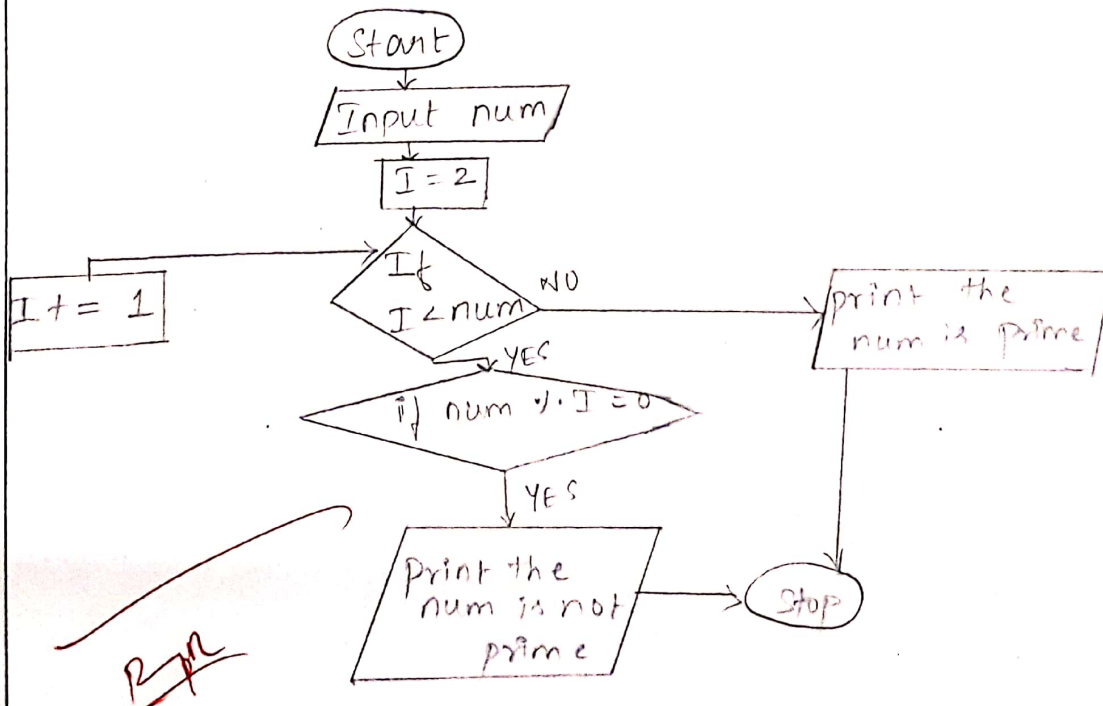
Date: 18/10/24

**Prime Number**

**Write an Algorithm and draw a Flowchart to check whether the given number is Prime or not.**

**Algorithm:**

- Step 1: start  
 step 2: Read the value of  $x$   
 Step 3: Divide  $x$  by the numbers between  $(2 \text{ \& } x-1)$   
 Step 4: If  $x$  is divided by any number between  $(2 \text{ \& } x-1)$  print  $x$  is not prime number  
 Step 5: Else print  $x$  is prime number  
 Step 6: stop

**Flowchart:**

Ex. No.: 4

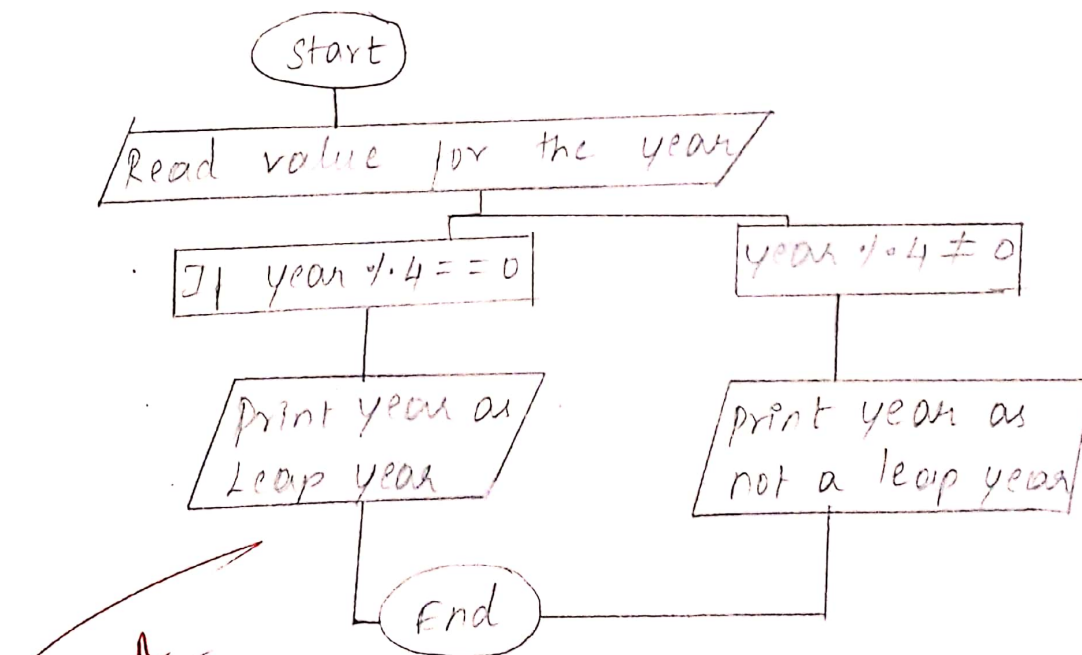
Date: 18/10/24

**Leap Year**

Write an Algorithm and draw a Flowchart to check whether the given year is Leap year or not.

**Algorithm:**

- Step 1: start
- Step 2: Read the value for the year
- Step 3: If  $\text{year} \% 4 == 0$
- Step 4: print year is leap year
- Step 5: Else print year is not leap year
- Step 6: stop

**Flowchart:**



Ex. No.: 5

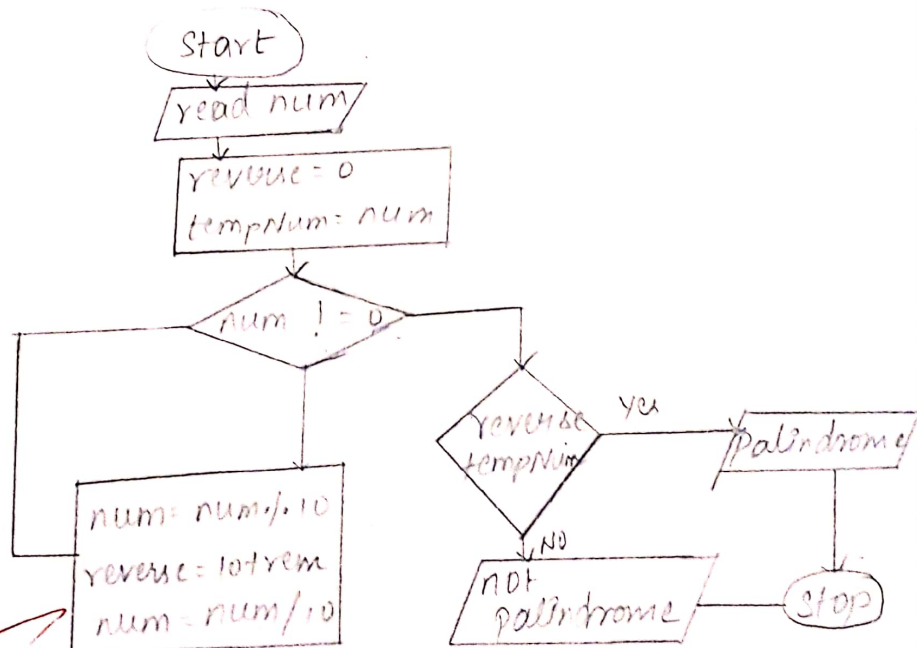
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**Palindrome Number**

Write an Algorithm and draw a Flowchart to check whether the given number is palindrome number or not.

**Algorithm:**

Step 1: Read num  
 Step 2: declare variable reverse & assign input to a tempnum = num  
 Step 3: run loop until num != 0 becomes false  
     while num > 0  
         → rem = num % 10  
         → reverse \* = 10 + rem  
         → num = num / 10  
 Step 4: check reverse = tempnum  
 Step 5: If step 4 is true, print It is palindrome  
         else Print not a palindrome

**Flowchart:**

*Pal*

Ex. No.: 6

Date: 18/10/24

## Sum of Digits

Write an Algorithm and draw a Flowchart to calculate the sum of digits in the given number.

Algorithm:

step 1: Read  $n$   
 step 2: Declare  $sum = 0$   
 step 3: Declare  $remainder = n \% 10$  { declare  
 $sum = sum + remainder$   
 $n = n / 10$   
 step 4: If  $(n > 0)$  then go to step 4, else  
 go to step 5  
 step 5: print  $sum$

Flowchart:

